

REMARKS

Reconsideration is requested for claims 1-16 and 20-22. Favorable action is requested for new claim 25.

Claims 23 and 24 which are understood to have been withdrawn from consideration as being directed to a non-elected invention in response to a restriction requirement have been cancelled without prejudice or disclaimer.

Claims 17-19 were indicated to be allowable if rewritten in independent form. Claim 17, from which claims 18-19 depend, has been rewritten in independent form and it is respectfully submitted that claims 17-19 are thereby placed in condition for allowance.

The drawings were objected to on various grounds. FIG. 1A has been changed to add reference number 21 and to change one of the occurrences of reference number 51b to 57b, consistent with the original disclosure. The specification has been amended to change the occurrence of reference numbers 31a and 31b in Para. [0020] to 33a and 33b. Reference numbers 43c and 43d appear in original FIG. 3 and have not been added to any figures. The foregoing comments and amendments, and the attached replacement sheets are submitted to address each grounds for objection, and withdrawal of the objection is cordially urged.

Claim 6 was objected to on the grounds that it recites "a connection point" while there are multiple connection points along the structure. It is asserted that the language renders the claim indefinite, however, the claim was not rejected under 35 U.S.C. 112, second paragraph. Nonetheless, claim 6 has been amended to provide greater clarity and withdrawal of the objection is cordially urged.

Claims 1-16 and 20-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,193,414 to *Trochman* in view of U.S. Patent Application Publication No. 2003/0164185 to *Price*<sup>1</sup> in view of U.S. Patent Application Publication No. 2002/0066239 to *Gillis*.

Claim 1, from which claims 2-16 and 20-21 depend, defines a collapsible structure with a self-locking mechanism, comprising a first hub, at least two struts pivotably connected at first ends thereof to the first hub and movable relative to each other between a folded position and an expanded position, a tension member adapted to limit pivotable movement of the at least two struts such that, when in the expanded position, the at least two struts define an angle of less than 180°, a locking hub, and at least two locking struts pivotably connected at first ends thereof to the locking hub and, at seconds ends thereof, to connection points on respective ones of the at least two struts.

The structure in *Trochmann* that is asserted in the Official Action to correspond to “at least two locking struts pivotably connected at first ends thereof to the locking hub and, at seconds ends thereof, to connection points on respective ones of the at least two struts” is identified as the struts 21b, 22a which are pivotably connected at first ends by pivot links 30. Presumably it was intended to identify the struts 21a and 22b as corresponding to the at least two locking struts. Regardless, whether the struts 21b and 22a or the struts 21a and 22b are considered to correspond to locking struts, they are pivotably connected proximate center points thereof, to structures that are understood to correspond to the at least two struts. The struts 21b,

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<sup>1</sup> *Trochmann* and *Price* were not listed on a form PTO-892. The Examiner is requested to list these patents on a form PTO-892 to accompany the next action in this application.

22a (or 21a and 22b) are not pivotably connected at second ends thereof to the struts 21b and 22a as recited in claim 1. Nothing in *Price* or *Gillis* shows this structure.

In view of the differences between claim 1 and *Trochmann* in view of *Price* and *Gillis*, it is respectfully submitted that claim 1 and the claims dependent therefrom define patentably over the applied documents.

Claims dependent from claim 1 define over the applied documents for additional reasons. For example, claim 6 recites that wherein a distance between a connection point of the connection points and the first hub for any one of the at least two struts is greater than a length of a respective one of the at least two locking struts. In *Trochmann*, the length of the struts 21a and 22b between the points 30 and 31 appears to be longer than the distance between the points 31 and 32 on the struts 21b and 22a. For this additional reason, it is respectfully submitted that claim 6 and the claims dependent therefrom, claim 7, define patentably over the applied documents.

New claim 25 recites that when the at least two struts are in the expanded position, compression forces in the at least two locking struts increase as they are moved toward a line extending through the connection points at the second ends of the at least two locking struts from a position on a distal side of the line from the first hub and compression forces in the at least two locking struts decrease as they are moved away from the line to a locked position on a same side of the line as the first hub. None of the applied documents disclose or suggest such an arrangement and claim 25 defines patentably over the applied documents for at least this additional reason.

It is respectfully submitted that all of the pending claims, claims 1-22 and 25, are in condition for allowance. Allowance is cordially urged.

To the extent that the applicant does not respond to a particular comment in the Official Action, the applicant does not intend by this to indicate acquiescence in or agreement with the comment. To the extent that any extensions of time are necessary in connection with this application it is requested that there be a standing petition for extension of time and that any additional fees that are required, or refunds due, in connection with this or any other paper filed in connection with this application be charged to Deposit Account 503015.

If the Examiner is of the opinion that a telephone conference would be helpful in resolving any outstanding issues, the Examiner is urged to contact the undersigned.

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Respectfully submitted,  
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Date: November 13, 2007

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Patent  
Application No. 10/779,632  
Attorney's Docket No. 000002-001

## APPENDIX